Emergent Narrative and Reparative Play

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Abstract. Eve Sedgwick's theory of reparative reading offers a mode for interpreting text that is "additive and accretive" and "wants to assemble and confer plenitude on an object". It was developed in response to what Sedgwick calls "paranoid reading", which embodies the desire to locate a stable, canonical meaning and is therefore hostile to the notions of multiplicity and surprise. We argue that interactive digital narrative can be productively understood through the paranoid/reparative framing, and that in particular, narrative sandbox games—games that lean heavily on emergence to produce a narrative effect—invite a kind of reparative play. Narrative sandbox systems function by producing deliberately incomplete artifacts that facilitate a diversity of reparative meaning-making processes by the player; they invite repair by arriving in disrepair.

Keywords: Emergent narrative \cdot Ludonarrative hermeneutics \cdot IDN theory.

1 Introduction

Recent work on ludonarrative hermeneutics [12, 10] has attempted to address the question of how players make sense of narrative meaning in interactive digital narrative (IDN) systems, including narrative games. To date, this work has largely focused on the analysis of games in which a strong protostory is deliberately embedded by the designers: in other words, games that attempt to communicate certain preauthored narrative events to the player on every playthrough, regardless of variations that might arise from one playthrough to the next. In attempting to apply a hermeneutic approach to the analysis of narrative sandbox games such as The Sims, where no particular narrative events are fixed in place by the game's creators, we are left with an open question: how do players go about interpreting narrative meaning when the units of narrativity embedded in a game by its designers are much smaller, much more abstract, and much more freely recombined than in the archetypal cases of heavily protostoryladen narrative games? To address this question, we propose that the narrative meaning-making process in narrative sandbox games can be understood through the lens of reparative reading, as articulated by Eve Sedgwick [15].

Reparative reading was coined by Sedgwick in *Touching Feeling*, as an alternative for what she considered the "paranoid" turn in critical studies as exemplified by New Historicism (among others). Instead of looking to create a strict framework that anticipates outcomes, reparative reading offers a "weak" network: that is to say, flexible, mutable, and capable of being rearranged. Sedgwick's work here is grounded in psychoanalytic and queer theory, but the very mutability of reparative reading as an approach makes it adaptable across multiple different fields and frameworks [8, 9, 5].

Others have already moved to bring reparative reading practices into games. In particular, scholars operating in the queer games studies tradition have used techniques of reparative reading to reinterpret a wide variety of games from a queer perspective [13]. Kara Stone has also proposed the practice of reparative game design, in which the creator's process serves to repair overdetermined spaces in the medium [17]. However, our notion of reparative play differs from existing work in how it calls attention to the way that games themselves can orient players toward particular modes of interpretation—in the case of narrative sandbox games, a reparative mode.

The reparative process is active; the reader turns to the "part-objects" of a text and assembles them to engender a kind of personal meaning. Sedgwick notes that "the desire of a reparative impulse [...] is additive and accretive. Its fear, a realistic one, is that the culture surrounding it is inadequate or inimical to its nurture; it wants to assemble and confer plenitude on an object that will then have resources to offer to an inchoate self." Repair involves reassembly into, as Sedgwick says, "something like a whole—though, I would emphasize, not necessarily like any preexisting whole" [15, p. 128]. Because narrative sandbox games contain no pre-assembled narrative, only fragmented pre-narrative bits of structure for the player to manipulate and interpret, they invite the practice of repair, first in the interpretative act of making sense of the raw, real-time experience of the interaction loop, and then in the effective act of guiding the further development of the emerging narrative.

Sedgwick suggests that reparative practices can teach us about "the many ways selves and communities succeed in extracting sustenance from the objects of a culture" [15, p. 150]. In this sense, reparative practices offer a new context for understanding how meaning is made out of play experiences, most legibly in narrative sandbox games, but also across the breadth of interactive digital storytelling as a medium. Furthermore, in arguing that narrative sandbox games orient their players toward reparative reading and play, we open investigation into how the mechanics of any given work of interactive digital narrative might be orienting its users toward particular modes of reading and play.

2 Background

Key to the argument of how narrative sandbox games invite reparative reading, and from there reparative play, is the idea that a work of interactive digital narrative, or a class of such works, can invite a particular reading practice at

all. To get there, it's useful to examine how the theory of interpretation has penetrated the field of interactive digital storytelling. Roth, van Nuenen, and Koenitz [12] have put forth their own "ludonarrative hermeneutics" as an extension to Koenitz's System, Process, Product model of IDN [6]. Their extension, the "hermeneutic strip", imports Heidegger's hermeneutic circle and adds a second circle; the part-whole interpretation loop of an unfolding narrative coincides with and mutually reinforces the player-system interactions that are causing the unfolding. Narrative meaning making occurs as iteration through the resulting double circle.

Another conceptual tool in the wider territory of ludonarrative hermeneutics is the *story volume*, a mapping in narrative space of all the possible stories a work of IDN can produce. Story volumes "enclose a family of emergent stories" that "explore similar themes or invoke a similar mood" [4]. The idea is analogous to the SPP model's *protostory*, which "describes the concrete content of an IDN system as a space of potential narratives" [6]. The story volume framing differs from the protostory in its emphasis on the shape of the Product stories and de-emphasis on any narrative cohesion prescribed by the System; as we'll see in our look at narrative sandbox games, story volumes can be spun out of works that have very little concept of a protostory.

If we accept that hermeneutics are now operative in IDN, we might next investigate how one particular hermeneutic or class of hermeneutics differs in operation from another. Insofar as the double circle model makes room in the meaning making process for the intervention of game systems and their affordances (inside the upper circle), how might the particularities of a system's design give texture to the interpretative loop? Games are ergodic objects that require "nontrivial effort" in the production of their narratives [1, p. 1]. We might consider how the arrangement of components in System pushes or pulls us into an orientation congruent with one or another particular mode of interpretation. This is the perfect entry point for Sedgwick, who positions reparative reading in an ecosystem of reading practices: a hermeneutic among hermeneutics.

In particular, Sedgwick defines reparative reading against what she sees as the dominant form of critical interpretation—what is "perhaps by now nearly synonymous with criticism itself"—paranoid reading [15, p. 124]. Paranoid reading, as Sedgwick explains, is sourced in what Paul Ricoeur calls the "hermeneutics of suspicion" [15, p. 124]. It is anticipatory and "places its faith in exposure" [15, p. 130], or the teasing out of "true" meaning from a text. Here Sedgwick quotes Ricoeur on Marx, Nietzsche, and Freud, the three intellectual progenitors whose ensuing traditions Ricoeur invented the category to describe.

For Marx, Nietzsche, and Freud, the fundamental category of consciousness is the relation hidden-shown or, if you prefer, simulated-manifested.... Thus the distinguishing characteristic of Marx, Freud, and Nietzsche is the general hypothesis concerning both the process of false consciousness and the method of deciphering. The two go together, since the man of suspicion carries out in reverse the work of falsification of the man of guile [15, p. 125]

Consider narrative discovery games, which position the player as investigator ferreting out a narrative truth, "carrying out in reverse the work of falsification" perpetrated by the game object and its designers, using an interactive toolkit supplied by those same perpetrators. These games ask specific questions and give you the tools to dig up their specific answers; in Outer Wilds—what happened to the Nomai; in Return of the Obra Dinn—where is everyone on the ship's manifest; in Her Story—did she really do it? All the narrative energy is tied up in answering these questions; all the ergodic friction comes from grinding against the systems that makes answering them a challenge. These games, then, invite paranoid readings. We might say they have strong protostories; that is, the narratives that emerge in the Product, that get read out through the iteration of the hermeneutic strip, are tightly tethered to the prefigurations in System. Discovering pieces of the narrative in different orders changes the texture of the protostory but in relatively undramatic ways. Conversely, we might say their story volumes are closed. The volumes are hard-boundaried; they purport to fully and cleanly encapsulate their inner spaces. For an extreme reading of this kind of constrained multiplicity, we can look at an ancestor to IDN theory in Umberto Eco's The Open Work and his analysis of a particular hermeneutic of allegory from the Middle Ages that "posited the possibility of reading the Scriptures (and eventually poetry, figurative arts) not just in the literal sense but also in three other senses: the moral, the allegorical, and the anagogical." Of this he writes, "What in fact is made available is a range of rigidly pre-established and ordained interpretative solutions, and these never allow the reader to move outside the strict control of the author." [2, Ch. 1, p. 6]

Sitting in contrast to narrative discovery games are narrative sandbox games, typified by genre exemplars *Dwarf Fortress* and *The Sims*. For these games, there are no prefigured narratives to discover; their protostories are weak. Narrative coheres *only* via iteration through the hermeneutic strip as the player interacts with System via Process and makes sense of the output in Product. Of Melanie Klein's "depressive" position that is a precondition for the reparative orientation, Sedgwick writes, "this is the position from which it is possible [in turn] to use one's own resources to assemble or 'repair' the murderous part-objects into something like a whole—though, I would emphasize, *not necessarily like any preexisting whole*" [15, p. 128; Sedgwick's emphasis]. The narrative project of the *Sims* player is to take the pre-narrative part-objects of the game and assemble them into "something like a whole". This cannot look like any preexisting whole because there is none. The narrative must be repaired, because it arrives in disrepair.

How does this repair happen, and what, in this mapping, are "one's own resources"? They are, oddly, the narrative connections that sit outside the game's systems. This is a move vital to the work of the ludonarrative interpreter who's to make sense of a narrative sandbox experience with no referent; they must fill in the lacunae—unavoidably present in a weak prototype—by "confer[ing] plentitude on an object" that isn't up to the task of doing so itself. This conference of plentitude is the pulling in of threads from an outside context to mend the

narrative that's spun out of the upper circle. Of course the object will contain ludonarrative devices that assist this process and anticipate aspects of the emerging narratives (things like mechanics, tone-setting art styles and sound design, etc). In this way we might say narrative sandbox games' story volumes are open; they sketch their boundaries to suggest shape but are less concerned with strict in/out delineation. Sedgwick positions reparative as a weak theory in contrast to the strong, totalizing impulse of the paranoid. (This is not disparaging; Sedgwick points to reparative reading's acceptance of its limitations as a strength of the theory.) Here we see the weakness in action; because the emerging narrative does not benefit from an author's prefiguration, because it may wander into a thorny corner of its open story volume, the scope of its coherence may be local instead of global, but it has the potential to be nourishing nonetheless.

It's tempting to think of the narratives in narrative discovery games as also arriving in disrepair. But the tools of repair, in the Sedgwickian formulation, are furnished from "one's own resources" and cannot be shipped with the game object as part of its suite of mechanics. It's more accurate to say these narratives arrive intact but buried (think of the digging metaphor we used earlier) and that you're given tools of revelation: a compass to find the relevant sites and a hammer and chisel to excavate them. How intact these buried narratives are can vary, and this gives a bit of reparative flex to these broadly paranoid systems. Her Story famously doesn't communicate when you've satisfactorily unearthed what it has hidden [16]. Return of the Obra Dinn, on the other hand, explicitly reifies the revelation of its truths; it's difficult (but humorous) to imagine the Obra Dinn player who correctly matches three crewmates to their fates and triggers the validation sequence but who persists in their doubt of the results.

We've formulated reparative reading in the context of IDN, but the reparative practice is coextensive with the move from the hermeneutic circle to the hermeneutic strip. The reparative work of interpretation happening in the lower circle flows back to the upper; the repairer moves from interpreting events that are occurring to reifying their interpretation as game actions that trigger the next iteration of events. Reparative reading becomes reparative play; interpretation begets actions, and the cycle is repeated. Here the repairer acts as co-author to the narrative object, using game affordances⁴ to mine narrative material [14] and sculpting this material into a narrative work.

3 Reparative Play: A Sims Case Study

Consider the iconic narrative sandbox franchise *The Sims*. Its story volume is open, a sketch of a sanitized version of 21st century suburbia. Within that story volume, the game does not dictate to players what they ought to be doing or what their sims' narratives will be; the furthest it goes is to suggest potential actions players can take based on their sims' needs. If a romance sim has a fear of getting married, the marriage option is still available to the player; the sim

⁴ Beyond the affordances of the game itself, modding offers another domain of reparative play possibilities, but those practices are outside this paper's scope.

may go into aspiration failure, but that failure then becomes another part-object to be assembled.

Because The Sims doesn't prefigure its narratives, narrative must cohere as the player moves through the hermeneutic strip, taking actions, witnessing their effects, and interpreting the results. The player must interpret why a specific action is happening at any given moment. A spontaneous flirt might be interpreted as a result of a sim's promotion putting them in a good mood and boosting their self-esteem, or it might be seen as a sign of true love. The chosen reading then offers shape to the player's next choices: if the autonomous flirt is interpreted as a sign of the sim's interest, then the player may choose to send their sim on a date with the NPC of interest. The game actions taken as a result of this interpretation then engender their own consequences that are in turn subject to interpretation, and the cycle continues. These narrativizations are influenced by a player's "own resources", the stories they're most interested in telling through this sort of imaginative play. The process by which this happens is one of extrapolative narrativization [7]: in making narrative sense of Sims play, players do not simply transcribe the series of game events as it unfolds. Instead, they confer additional layers of interpretation on these events, adding extra details to the narrative-as-perceived—which then influences what actions the player is inclined to take next.

Sims' speech bubbles are a common intervention point for this extrapolative narrativization. Player-authors of Sims retellings [3] often attempt to attribute a meaning to the game's abstract dialogue icons in order to shore up an interpretation. In roBurky's Alice and Kev [11]—a notable Sims 3 retelling centered on a homeless father and daughter—the author looks at Alice's first real adult conversation with an NPC as a site of potential meaning, suggesting that a lake might represent her sleeping rough in parks and a Yeti figure might be her ogre of a father. Because Alice's life in the story has been so shaped by roBurky's roleplaying of her as homeless, the author confers meaning on this conversation by attributing referents to the otherwise ambiguous dialogue icons that would cast the interaction as a meaningful opening-up. Another conversation between two different sims involving a lake and a Yeti might suggest an entirely different reading, such as a camping trip gone wrong. The same speech bubbles interpreted differently might lead players to take two very separate sets of actions; in roBurky's reading, a player might be moved to deepen the relationship with the NPC, where in the camping trip scenario, a player might decide to send their sim on another, hopefully more successful camping trip. Extrapolative narrativization is the key by which players become co-authors, as their interpretive frameworks overlay the game's mechanics, guide them to actions that fulfill the narratives suggested by their frameworks, and ultimately allow them to assemble a cohesive, satisfying narrative through reparative play.

Even The Sims's pre-structured scenarios, which could be considered preassembled narrative pieces for discovery, are malleable to players' intentions. The $Sims\ 2$ shipped with several scripted events in its base neighborhoods; events were set to trigger, but players could ignore those scenarios and instead focus on playing their own created characters. If the households with queued narrative were opened after players had already changed the world state, the designerprefigured events would sometimes not be able to trigger, or their conditions would cause them to play out differently as a result of the player's previous decisions elsewhere in the neighborhood. Players who wanted Cassandra Goth's wedding to Don Lothario to succeed rather than fail, as it was scripted to do under default conditions, could go to his house and invite her over, raising his relationship with her past the threshold at which he would not leave her at the altar. That completed, they could reopen the Goth household to the wedding scenario, still set up exactly as scripted, and complete the wedding as they desired it to go. Mary-Sue Pleasant was scripted to always fail the chance card that came up when her household was loaded, regardless of the action the player took, causing her to come home and potentially catch her husband cheating on her with their maid. Players discovered that ignoring the chance card entirely avoided the trap; others simply had her husband send the maid home after she was finished cleaning. When a player had decided how they wanted the scripted event to play out, regardless of the game's structure, their next actions could subvert the game's suggestions and instead offer a reparative reading in which the player's own preferred meaning would take precedence over the story suggested by the game.

This sort of reassembly could not happen without the part-objects that Sedgwick discusses and which characterize narrative sandbox games. All Sims narratives arrive in disrepair, made up of small actions with specific game verbs that have specific effects on the world state. These are most often very limited in scope, affecting one sim or one household at a time; it is only through the assemblage of many of these actions that major changes, like marriages and promotions, occur. Game verbs like "study a skill" are part-objects in the larger narrative of "Cassandra Goth got promoted"; without them, the latter cannot occur mechanically, but also cannot be meaningful narratively. Any verb can be a part-object, depending on what is meaningful to the player; that is what makes The Sims such a clear instance of an open story volume. Reparative play, and the hermeneutic strip, enable one to cut through a dizzving plethora of possible meanings. As the player reifies an ever-evolving interpretation of events and takes further actions that stem from that emerging interpretation, a disparate mass of narrative parts, player-provided resources, and player-conferred meanings coalesce into a satisfying narrative: "something like a whole".

4 Conclusion

Altogether, we hold that a Sedgwick-inspired theory of reparative play represents a powerful new lens for understanding narrative meaning-making in narrative sandbox games and in interactive digital storytelling at large. Sedgwick's figuring of "part-objects" is a useful framework for thinking about how units of narrative get assembled into cohesive stories. The player's reparative instinct to confer meaning that the system does not already provide maps cleanly to the

idea of extrapolative narrativization, through which the player brings their own resources to bear on what the game offers. By interpreting game events, which then spur further actions and interpretations, players engage in the hermeneutic strip of meaning-making—but rather than narrowing in on a canonical, designer-intended narrative meaning, the player instead constructs an assemblage of narrative part-objects whose meaning is derived partly from the resources that this player in particular has brought to bear. As a counterpart to a ludonarrative hermeneutics of suspicion, Sedgwick's framework thus points the way to a parallel ludonarrative hermeneutics of repair, and from there, toward an investigation into broader paradigms of interpretive orientation.

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